DOCUMENT RESUME

ED 385 528 SP 036 151

AUTHOR Wineburg, Mona S.
TITLE The Process of Peer Coaching in the Implementation of Cooperative Learning Structures.
PUB DATE Apr 95
NOTE 23p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, April 18-22, 1995).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Behavior Change; *Cooperative Learning; Educational Change; Elementary School Teachers; *Faculty Development; *Inservice Teacher Education; Intermediate Grades; Junior High Schools; Middle Schools; *Peer Influence; Peer Teaching; Program Implementation; Qualitative Research; *Teacher Improvement
IDENTIFIERS *Peer Coaching

ABSTRACT

Twenty-two elementary and middle school teachers were studied over the course of a school year as they implemented cooperative learning structures in their classrooms. Twelve of the teachers did peer coaching and 10 did not. The teachers participated in 2 days of staff development to learn six specific cooperative structures and to learn and practice a method of peer coaching. Qualitative data-gathering and analysis methods were used. Content analysis of both oral and written discourses investigated the process of peer coaching in the implementation of cooperative learning structures. Results indicated that the process of peer coaching did affect the implementation of cooperative learning structures. Peer coaching appeared to encourage teachers to reflect on their teaching, to take risks, and to change. Of the teachers who participated in the original staff development on cooperative learning, only eight used the new structures at a level of use which focused on the students rather than on the teacher; all of these teachers had participated in the peer coaching, indicating that the coaching process facilitated the successful transfer of a new strategy from the workshop environment to the classroom. (Contains 31 references.) (JB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 385 528

THE PROCESS OF PEER COACHING IN THE IMPLEMENTATION OF COOPERATIVE LEARNING STRUCTURES

Mona S. Wineburg, Ph.D.
Maryland State Department of Education

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M Wineburg

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Paper Presented at the National Conference of the American Educational Research Association
San Francisco, California
April 18-22, 1005

S636151

BEST COPY AVAILABLE

OBJECTIVES

Teacher trainers and administrators often assume that once a skill has been learned and practiced during soundly based in-service training sessions it will be incorporated into practice in classrooms. However, what often occurs is that when teachers become removed from the training sessions, enthusiasm wanes as they attempt to implement their newly gained knowledge in the "isolation" of their own classroom. This study investigated the process of peer coaching as a method of facilitating teachers as they implemented newly acquired knowledge. "Research needs to go beyond theories of change (what factors explain change) to theories of changing (how change occurs and how to use this new knowledge)" (Fullan, 1985, p.392). This study examined the "how" of change as it looked at the process of peer coaching as a vehicle to assist implementation of a new approach to teaching (cooperative learning structures).

The main purposes of this study were: (a) to analyze the oral and written discourse between teachers who engaged in peer coaching; (b) to describe the relationship of the discourse to levels of use and reported stages of concern; and (c) to ascertain the perceptions of the participants concerning the process. Specifically, this study investigated four questions: 1) What is the content of the oral and written discourse among coaching pairs during their coaching meetings? 2) How does the content of the oral and written discourse relate to the implementation process? 3) How does the content of the oral and

written discourse relate to the participants' perceptions as to how they are helping each other? 4) What factors affect the process of peer coaching?

PERSPECTIVE

John Goodlad, Director of the Center for Educational Renewal at the University of Washington, has called for the complete redesign of teacher education programs in this country (Goodlad, 1991), partly as a result of his investigation into the nature of inservice education (Goodlad, 1984). He discovered that a great many educators were not sufficiently grounded in the knowledge , and skills that are necessary to improve education and bring about change.

However, even if teacher education programs are redesigned, there is still the problem of training inservice teachers who might not benefit from any future redesign of teacher education programs. Fullan (1991) found that research-based innovations in teaching are not getting into the classroom in an efficient manner. In order to meet this goal, it is necessary to identify programs and strategies that facilitate implementation of training. Staff development has been defined as a "broad endeavor aimed at generating a rich environment, one in which every educator becomes a student of education and works continuously to improve his or her skills" (Joyce, 1986, p. 79). To this end, it is necessary to foster systems in which teachers are encouraged to learn new strategies, techniques and models of teaching that have been developed through research on effective

teaching. However, Fullan (1991) warns us that the use of staff development can be ineffective unless there is understanding of its use as a vehicle of change. "One of the great problems in educational reform is that there is too much well-intentioned 'ad hocism'--the use of single, segmented solutions unconnected or unintegrated with their systemic realities" (Fullan, 1991, p. 84). Additionally, even if staff development programs are carefully selected, based on positive research findings, and presented in a thoughtful and cogent manner, they are often not implemented over the long run (Fullan, 1991).

Joyce and Showers (1980, 1981, 1982) included only four main training components in their early work on staff development--presentation, demonstration, practice and feedback. Ultimately, upon reviewing over 200 research studies concerned with transfer of training, they found that a fifth component, coaching, was necessary in order to facilitate teachers as they implemented training into classroom practice.

Since research on peer coaching has shown positive results, it was selected as the implementation model to be studied. (Williamson & Russell, 1990; Carter, 1988; Gilman, 1988; Garmston, 1987, Baker & Showers, 1984; Showers, 1982). Peer coaching has been shown to facilitate implementation of in-service training into classroom practice, promote reflective thinking processes and self-analyses, and enhance teacher problem solving through teaming (Garmston, 1987; Joyce & Showers, 1988).

Cooperative learning structures were used for the technical training. Extensive research in this area has shown positive effects in academic achievement, higher order thinking skills, self-esteem or self confidence as a learner, intergroup relations (including cross-race friendships), social acceptance of mainstreamed children, and ability to use social skills. (Davidson, 1991; Graves, 1990; Kagan, 1989; Johnson & Johnson, 1989; Rollheiser-Bennett, 1986; Sharan, 1980; Slavin, 1980; Aronson, 1978).

The Concern-Based Adoption Model (CBAM) is the name of an organized procedure developed at the Research and Development Center for Teacher Education at the University of Texas at Austin (Hall & Hord, 1987). It was developed to systematically study the application of educational change by looking at the process of change from the dual perspectives of classroom practice and the perceived needs of teachers. Diagnostic instruments were developed to ascertain the levels of use of an innovation in classroom practice and to identify the concerns of teachers as they implement the innovations. The CBAM was selected as the vehicle to document the implementation of training as it occurred during the study.

If research-based innovations are to be transferred into classroom practice, then methods for facilitating implementation need to be explored. "From a research perspective, we know next to nothing about how well teachers implement the simpler strategies typically taught in short-term workshops" (Cohen,

1991, p. 18). Peer coaching has been identified as a successful method that facilitates teachers as they implement training (Joyce & Showers, 1988). Further research on the peer coaching process is needed in order to understand more fully its affect on the implementation of inservice training. This study examined the process of peer coaching in an attempt to gain deeper insight into what it is that makes peer coaching work.

METHODS/DATA SOURCES

Twenty-two elementary and middle school teachers were studied as they implemented cooperative learning structures in their classrooms. Twelve of the teachers did peer coaching and ten did not. The teachers participated in two days of staff development to learn six specific cooperative structures (roundtable, three-step interview, numbered heads together, think-pair-share, team discussion, jigsaw) and to learn and practice a method of peer coaching. The process of peer coaching was studied over the course of a school year. Qualitative data-gathering and analysis methods were used. Content analysis of both oral and written discourse investigated the process of peer coaching in the implementation of cooperative learning structures. The instruments designed in the Concerns-Based Adoption Model (CBAM): Innovation Configurations Component Checklist, Levels of Use of the Innovation, and the Stages of Concern Questionnaire, which were used to document the implementation of the cooperative learning structures, yielded quantitative data which was then subjected to qualitative

analysis.

The ways in which the process of peer coaching affects the implementation of cooperative learning structures were analyzed through a variety of routes. Triangulation of data was accomplished by comparison and analysis of transcription of audiotapes of peer coaching sessions, written responses to reflective questions and interviews with each participant. All teachers who formally coached during the study audio-taped their pre- and post-conference sessions. These sessions were transcribed and analyzed to identify the categories and, eventually, themes which emerged concerning the process. Codes were created to classify the discourse in order to cluster segments and facilitate the search for themes. Additionally, the coaching pairs completed both pre-conference and post-conference forms for each session. These were examined for recurring patterns and themes both within and across pairs. At the end of each coaching session the coached teacher responded in writing to reflective questions prepared by the researcher. These served as the final data source for the analysis.

Summary of Data Analysis

Research question	Instrumentation	Analysis
1. What is the content of the oral and written disclosure among coaching pairs during the coaching meetings?	audiotapes coaching forms reflective answers (written)	content analysis
2. How does the content of the oral and written discourse relate to the implementation process?	LoU interview SoC questionnaire	content analysis comparison of CBAM categories with content analysis
3. How does the content of the oral and written discourse relate to the participants perceptions as to how they are helping each other?	coaching forms reflective answers (written) individual interviews	content analysis
4. What other factors affect the process of peer coaching?	coaching forms reflective answers (written) individual interviews	content analysis

RESULTS

The results indicated that the process of peer coaching affected the implementation of cooperative learning structures. Each research question is analyzed specifically in the following section.

What is the content of the oral and written discourse among coaching pairs during the coaching meetings?

Content analysis of the data for this question revealed patterns which suggested that three types of discussions occurred during peer coaching meetings.

1. Teachers spent some time, mostly during pre-conference sessions, engaged in discussions about the logistics of peer coaching. Discussions included planning for future meetings, planning where in the classroom the coach should be located during the observation, and planning for substitute arrangements in the coach's classroom.

2. Peer coaching provided opportunities for teachers to prepare and rehearse their lessons. Four types of preparation and rehearsal were indicated by analysis of the discourse that occurred during the pre-conference coaching sessions, namely: (a) Teachers were able to identify concerns and reflect upon ways to solve potential problems as a result of the rehearsal that occurred when they explained the lessons to their coaches; (b) coaches asked questions to clarify the teachers' explanations which served as prompts for rehearsal; (c) the straightforward recitation by the teacher of what was to be done served as both

practice and an opportunity to receive confirming feedback; and d) teachers and coaches checked to ensure they would be using the cooperative learning structure correctly, both in form and usage. All of the types of preparation and rehearsal involved the teachers in joint problem-solving.

3. Peer coaching afforded teachers the opportunity to engage in professional discourse concerning both children and teaching. Peer coaching enabled teachers to discuss strategy, solve problems, assess their effectiveness, and reflect upon their professional development. This occurred in a number of ways, all of which encouraged reflective behavior by the teachers. They are as follows: (a) presentation of the data by the coaches led to reflection on teaching; (b) coaches' questions about the lesson led to the evaluation and illumination of weaknesses; (c) teachers' questioning about the feedback encouraged dialogue about teaching strategies and their appropriate uses; (d) problem-solving discussions occurred when teachers and coaches reflected upon the lessons together, centering around both the cooperative learning structures and their uses, as well as the behavior of the children; (e) teachers and coaches incorporated information learned through their earlier coaching sessions to improve their teaching; (f) teachers and coaches planned together and discussed possibilities for future lessons; (g) teachers received praise and compliments on both their teaching and their use of the cooperative learning structures; and (h) professional discourse occurred around

cooperative learning and children in general terms, as well as about methods of teaching. Teachers brought their personal experiences and their professional preparation into those discussions. The discourse also entered the realm of teachers' feelings and changing beliefs about what happens in classrooms.

How does the content of the oral and written discourse relate to the implementation process?

The results of the Level of Use Interviews of all of the teachers indicated that teachers who did peer coaching focused their use of the cooperative learning structures on the students to a greater degree than those who did not do peer coaching. All teachers, except one, reached at least Level III (Mechanical Use). That teacher stopped using the cooperative learning structures with her self-contained special education class and was at Level 0 (Non-Use). However, only those teachers who participated in peer coaching reached Level IV-B (Refinement) or Level V (Integration). One possible explanation for the differences may be that the process of peer coaching, in which teachers who peer coached had an opportunity to prepare and rehearse their lessons and engage in professional discourse with their partners, may have allowed them to resolve any mechanical use difficulties and focus more on the needs of their students.

Although no pattern was discerned when looking at the stages of concern between pairs of teachers in each school, a pattern did become evident when comparing the concerns of teachers who did peer coaching and those who did not. Eight teachers

exhibited high intensity of concerns at the impact level. Six of those teachers had actively participated in peer coaching during the school year. The Concerns Based Adoption Model point of view (Hall & Hord, 1987) indicates that it is important to arouse the impact concerns of teachers during the implementation of an innovation. Therefore, it would seem that peer coaching, which encouraged rehearsal and professional discourse, heightened the intensity of impact concerns for this group of teachers.

How does the content of the oral and written discourse relate to the participants' perceptions as to how they are helping each other?

Nine out of the ten teachers who participated in peer coaching found it helpful to do so. The teachers who did perceive they were helping each other identified a number of ways in which they were helped.

1. Peer coaching served to build the confidence of teachers by reassuring them, relieving their fears, and boosting their egos.

2. Peer coaching encouraged teachers to work through their concerns and thus use the cooperative learning structures to a greater extent.

3. Peer coaching enabled teachers to receive specific, helpful and non-judgmental feedback.

This question also served to confirm many of the themes that were identified in the content analysis of the oral and written discourse. Teachers' comments indicated that the peer coaching

BEST COPY AVAILABLE

encouraged them to reflect upon their teaching, to take risks and to change.

What factors affect the process of peer coaching?

It was intended that all of the teachers in this study would participate in peer coaching; however, that is not what actually occurred. Instead, ten teachers (five pairs) met for coaching at least three times, two teachers (one pair) met twice, and ten teachers (five pairs) did not meet for coaching at all. Information gathered from all of the teachers, whether they coached or not, was used to answer this research question.

The teachers identified a number of factors that affected the process of peer coaching. These were:

1. Lack of time inhibited peer coaching. It was difficult for all of the teachers to arrange meeting and observation times, but it was more difficult for teachers whose schedules were most disparate.

2. Support from the administration enabled peer coaching to occur. In many schools the active support of the principal was needed to enable teachers to meet.

3. Proximity of grade level was important. Teachers discussed the importance of this idea in terms of similarities in developmental levels of the children and familiarity of curriculum content, as well as in difficulty of scheduling across grade levels.

4. The comfort levels of teachers with each other was important. Teachers recognized the uniqueness of having a peer

observer in their classrooms and the importance of feeling at ease with their coaching partners.

5. The size of the school was important. Teachers in small schools, (one class for each grade level) found it very difficult to arrange for meeting times because of the limited staffing available to cover their classes.

A pattern appeared when the teachers were grouped according to those who coached and those who did not coach. The teachers who coached (a) showed a willingness to meet outside of regular school hours, (b) had principals who provided classroom coverage if necessary, (c) taught a grade level similar to their coaching partner or had classrooms nearby, and (d) felt comfortable with their partner and felt they benefitted from their discussions.

Those teachers who did not coach mentioned a variety of inhibiting factors. They included (a) lack of time, (b) no classroom coverage available, (c) schedules too different from their partners, (d) lack of principal's support, (e) first year teacher with too many other concerns, (f) cooperative learning structures not appropriate for self-contained special education class, and (g) the formality of the process was too daunting.

IMPORTANCE OF THE STUDY

This study investigated the process of peer coaching in the implementation of cooperative learning structures. The findings indicated that those teachers who were involved in the process of peer coaching discussed their lessons with their partners both before and after teaching. Only eight teachers implemented the

cooperative learning structures at a level of use which focused on the students rather than on the teacher. All of those eight were teachers who had participated in the process of peer coaching. It is, therefore, inferred that the peer coaching process facilitated the successful transfer of a new teaching strategy from the workshop environment to the classroom environment. This is consistent with the work of Joyce & Showers, 1988; Bennett, 1987; Joyce & Showers, 1983; and Showers, 1982.

One of the important functions of staff development with inservice teachers is the teaching of new strategies based on continuing research in education. Since the implementation of educational change must involve change in classroom practice (Fullan, 1991), it is important that ways are found to increase the successful transfer of inservice training.

Mastery of a new teaching approach requires that teachers practice, receive assistance, and organize their thinking in different ways (Stallings, 1989; Showers, 1982; Lortie, 1975). This statement is supported by two main themes identified in the first research question, "*Peer coaching provided opportunities for teachers to prepare and rehearse their lessons*"; and "*Peer coaching afforded teachers the opportunity to engage in professional discourse concerning both children and teaching.*"

The teachers who were involved in the process of peer coaching implemented the cooperative learning strategies with a greater focus on their students than those who did not coach.

The coaching provided time for rehearsal and practice of the newly learned skills. This is a unique situation for a classroom teacher; teachers usually plan and execute lessons without receiving any feedback from another professional (Brandt, R.S., 1987). If they do receive feedback, it is usually evaluative, which does not serve the same purpose as peer feedback.

Studies of what teachers do and think have indicated that the most effective feedback is often received from fellow teachers (Lortie, 1975). Peer coaching is designed for just this purpose. Teachers in this study who participated in peer coaching reported that it built their confidence, encouraged them to use the cooperative learning structures more often and presented them with non-judgmental feedback. These perceived benefits encouraged the teachers to reflect upon their teaching, (called "reflection-on-action" by Schon, 1987), take risks in their classrooms, and to change.

Teachers working in isolation have a more difficult time implementing new approaches to teaching than teachers who work with other professionals. Learning something new involves interaction (Fullan, 1991). Inservice training workshops provide opportunities for interaction, but too often the participants then return to their classrooms and attempt to implement the new learning without support. Peer coaching enabled the teachers in this study to continue to practice through regular, planned meetings during the school year. Most of the teachers who participated in the process of peer coaching progressed beyond a

routine level of use and many were able to focus their concerns on the impact the new strategies were having upon their students.

It is known that support of teachers during the early stages of a change project is critical (Hall & Hord, 1987). The teachers in this study were very clear about the types of support they required in order to implement peer coaching. More time, active administrative support, and a peer coaching partner with whom they felt comfortable were identified by all of the participants as essential. The teachers who did peer coaching were those who either had these supports in place or were willing to find time outside of their regular school hours. At the beginning of this research project every teacher was interested in peer coaching. The fact that only twelve of them were actually able to do the coaching portion emphasizes the importance of the identified supports.

The process of peer coaching was studied in more depth in this research than in much of the other research on peer coaching (Williamson & Russell, 1990; Joyce & Showers, 1988; Rogers, 1987; Sparks & Bruder, 1987; Joyce & Showers, 1983; Showers, 1982). As a result, some distinct contributions to the knowledge base about peer coaching were generated. The process of technical peer coaching may be successfully taught in a relatively short period of time, as compared to other research using technical peer coaching, depending on what is being implemented (Gilman & Smuck, 1988; Rogers, 1987; Sparks & Bruder, 1987; Showers, 1982). The use of audiotapes to gather oral discourse between peer coaching

pairs enabled the researcher to be an observer of the process and "hear" the oral discourse between the peer coaching partners without being directly involved in it. This meant that the teachers who did peer coaching acted as consultants for each other and were able to behave as professionals working together as their own change agents, without relying upon a staff developer to act as the "expert". These are unique findings. The themes and patterns discerned through this investigation provide additional depth to the existing knowledge about the process of peer coaching.

REFERENCES

Aronson, E. (1978). The jigsaw classroom. Beverly Hills, CA: Sage.

Baker, R. & Showers, B. (1984). The effects of a coaching strategy on teachers' transfer of training to classroom practice: a six-month follow-up study. (Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.)

Bennett, Barrie (1987). The effectiveness of staff development training practices: a meta-analysis. Ph.D. thesis, University of Oregon.

Brandt, R.S. (1987, February). On teachers coaching teachers: A conversation with Bruce Joyce. Educational Leadership, 44 , 12-17.

Carter, Y. (1988). The transfer of in-service education into classroom practice through peer coaching. Ed.D. thesis, Northern Arizona University. Dissertation Abstracts International, 50(6), 1630-A. Order No. DA8904905.

Cohen, E. (1991, Winter). Staff development for Cooperative learning: what do the researchers say? Cooperative Learning Vol.12, No.2, pp.18-21).

Davidson, N. (Ed.) (1990). Cooperative learning in mathematics: a handbook for teachers. Menlo Park, CA: Addison-Wesley.

Fullan, M. (1985). Change process and strategies at the local

level. The Elementary School Journal, 84 (3), 391-420.

Fullan, M. G. with Stiegelbauer, S. (1991). The new meaning of educational change. New York: Teachers College Press.

Garmston, R. J. (1987, February). How administrators support peer coaching. Educational Leadership, 44, 18-26.

Gilman, D. A. & Smuck, E. (1988). An evaluation of the staff development model, teachers teaching teachers of the Greater Jasper Schools. (ERIC Document No. ED 300 354).

Goodlad, J. (1984). A place called school. New York: McGraw-Hill.

Goodlad, J. (November, 1991). Why we need a complete redesign of teacher education. Educational Leadership 49, 4-10.

Graves, T. (1990, June). Cooperative learning and academic achievement. Cooperative learning Vol. 10, No. 4.

Hall, G. & Hord, S. (1987). Change in schools facilitating the process. Albany, N.Y.: State University of New York Press.

Johnson, D. & Johnson, R. (1989). Cooperation and competition: theory and research. Edina, Minnesota: Interaction Book Company.

Joyce, B. (1986). Improving America's schools. (pp.79-97). New York: Longman.

Joyce, B. & Showers, B. (1980, February). Improving in-service training: the messages of research. Educational Leadership 37, 379-385.

Joyce, B. & Showers, B. (1981). Teachers training research: working hypotheses for program design and directions for

further study. Paper presented at the annual meeting of the American Educational Research Association, Los Angeles.

Joyce, B. & Showers, B. (1982, October). The coaching of teaching. Educational Leadership 40, 4-10.

Joyce, B. & Showers, B. (1983). Power in staff development through research on training. Alexandria, Va: Association for Supervision and Curriculum Development.

Joyce, B. & Showers, B. (1988). Student achievement through staff development. New York: Longman.

Kagan, S. (1989, December). The structural approach to cooperative learning. Educational Leadership 46, 12-15.

Lortie, D. (1975). School teacher: A sociological study. Chicago: University of Chicago Press.

Rolheiser-Bennett, C. (1986). Four models of teaching: a meta-analysis of student outcomes. Ph.D. thesis, University of Oregon.

Schon, D. (1987). Educating the reflective practitioner. San Francisco: Jossey-Bass.

Sharan, Shlomo. (1980). Cooperative learning in small groups: recent methods and effects on achievement, attitudes, and ethnic relations. Review of Educational Research 50, 241-271.

Showers, B. (1982, December). Transfer of training: the contribution of coaching. Center for Educational Policy and Management. Eugene, OR. (ERIC Document Reproduction Service No. ED 231 035).

Slavin, R. (1980). Cooperative learning. Review of Educational Research 50, 315-342.

Stallings, J.A. (1989). School achievement effects and staff development: What are some critical factors? Paper presented at American Educational Research Association annual meeting.

Williamson, L. & Russell, D. (1990, Spring). Peer coaching as a follow-up to training. Journal of Staff Development 11, 2-4.